CLAIMS

1/ A router made up firstly of at least two router modules, only one of which is in an active state at any given time, the others being in a standby state, and secondly of changeover means making it possible to cause one of said other router modules to go from a standby state to an active state when the router module in the active state stops, said router being connected to neighbor routers, and said router modules having state machines associated with each of said neighbor routers, wherein each of said router modules further has data storage means which, in the active state, enable it to store data relating to the states of the state machines, when said machines are in stable states, and data retrieval means for retrieving said data when the router module changes over to the active state.

2/ A router according to claim 1, in which said data is stored by a shared memory that is shared between said router modules.

3/ A router according to claim 1, in which said data is stored by inter-process communications means enabling said router modules to communicate with one another.

4/ A router according to claim 3, in which said inter-process communications means are a software bus of the CORBA type.

5/ A router according to claim 1, in which each of said router modules further has means for storing data relating to the associated neighbor router when said neighbor router is created, and means for retrieving said data when a changeover to the active state takes place.

6/ A router according to claim 1, in which a stable state is a state from the following list: "Down", "Init", "ExStart", "2-way", "Exchange", "Full", and "Loading".

5   7/ A router according to the preceding claim, in which said list further includes the state of the state machine after a Database Description Packet exchange.

8/ A router according to claim 6, in which each of said
10   routers has means for storing any data transmission message received, even though the corresponding state machine is in the "Full" state.